

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/733,760	12/12/2003	John Charles Calhoon	003797.00690	003797.00690 8738	
28319	7590 12/05/2005		EXAMINER		
BANNER & WITCOFF LTD., ATTORNEYS FOR MICROSOFT 1001 G STREET, N.W.			BERHANU, SAMUEL		
			ART UNIT	PAPER NUMBER	
Suite 1100	Suite 1100				
WASHINGTON, DC 20001-4597			DATE MAILED: 12/05/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

f	ے
---	---

	Application No.	Applicant(s)				
Office Action Summany	10/733,760	CALHOON ET AL.				
Office Action Summary	Examiner	Art Unit				
	Samuel Berhanu	2838				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on 16 Se	1) Responsive to communication(s) filed on 16 September 2005.					
,	↑ This action is FINAL . 2b) This action is non-final.					
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-24,26 and 27 is/are pending in the a	4)⊠ Claim(s) <u>1-24,26 and 27</u> is/are pending in the application.					
4a) Of the above claim(s) 26 and 27 is/are with	4a) Of the above claim(s) 26 and 27 is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-24</u> is/are rejected.						
,	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine						
10) \boxtimes The drawing(s) filed on <u>12 December 2003</u> is/are: a) \boxtimes accepted or b) \square objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
11) I he oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action of form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No.						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment/c\						
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date 6) Other:						

Application/Control Number: 10/733,760 Page 2

Art Unit: 2838

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 9/16/2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of application numbers 10/733850 and 10/733820 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1, 3-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Stephens (US 5,734,254).

Regarding Claim1, Stephens discloses in Figures 1 and 2 an apparatus for transmitting inductive energy to a battery pack (110), the battery pack including a microprocessor (120) for processing data relevant to the inductive energy, the apparatus comprising: a memory (195) for storing computer readable instructions relevant to charging a battery pack (Column 4, lines 46-61); a processor unit (195) operatively coupled to the memory; and a transmission element (132) operatively coupled to the processor so as to provide the inductive energy to the battery pack, the transmission element configured to provide a

Art Unit: 2838

polling message to the power adapter (140), the polling message comprising periodic energizing and de-energizing of the transmission element (Based on the control signal (which is a polling message signal) received by the controllers via the communication links, the controller adjust charging function to be disabled or enabled, which resulted energizing and de-energizing the inductive power transmission elements 132 and 162).

Regarding Claim3, Stephens discloses a communications device for receiving and transmitting data (20,50) and the communications device being operatively coupled to the transmission element (24,54)

Regarding Claim4, Stephens discloses an apparatus further comprising an antenna (24,54) and a communications device configured to receive (24,54) the computer readable instructions and configured to transmit (24,54) the instructions to the antenna for wireless data communications to a battery pack (Column 3, lines 41-49).

Regarding Claim5, Stephens discloses a processor unit (50) is configured to receive a plurality of charging parameters from the battery pack (Column 3, lines 59-67, column 4, lines 1-6).

Regarding Claim 7, Stephens discloses an apparatus comprising a plurality of transmission elements each configured to operate independently of each other (24, 38, 68, 54,32,62).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2838

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephens (US 5,734,254) in view of Stobbe (US 6,275,143).

Regarding Claim 2, Stephens discloses the claimed invention, except the apparatus in which the memory includes authentication data for authenticating the battery pack for the inductive energy transmission. However Stobbe discloses the apparatus in which the memory includes authentication data for authenticating the battery pack for the inductive energy transmission (Column 6, lines 5-20). It would have been obvious to a person having ordinary skill in the art at the time of the invention to implement authentication data transfer means in Stephens battery pack and charging system as taught by Stobbe in order to protect against unintentional or unwanted battery charging.

Regarding Claim 6, Stobbe discloses a processor unit (18) is configured to receive a digital security certificate from a battery pack (Column 6, lines 5-20).

6. Claims 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parks et al. (US 5,455,466) in view of Garcia et al. (US 5,963,012).

Regarding Claim8, Parks et al disclose a battery pack configured for receiving inductive energy for charging (200b) comprising: a processor unit (228) for processing computer readable data relevant to receiving the inductive energy

Art Unit: 2838

and for processing data communication with a computer system; a pick up coil (200b) configured for receiving the inductive energy; a charger operatively coupled to the processor unit and the pick up coil (224); the charger configured to output a direct current responsive to the inductive energy (222); and an energy storage unit (225) configured for receiving the direct current. Stephens does not disclose a pick up coil (204) configured for receiving a polling message and a charger configured to output a direct current responsive to the polling message. However, Garcia et al. disclose in Figure a pick up coil configured for receiving a polling message and a charger configured to output a direct current responsive to the polling message (Column 2, lines 30-59) (Noted that, the electromagnetic resonant wave Created by the coils established a mutual induction and a data transfer between the charger and the battery pack, which including energizing and de-energizing of a transmission element in the source (204) at a predetermined elapsed time value, for certain period of time is starts signal transmission when the electro magnetic waves are generated by the excitation circuits, and stops for certain period of times when the two circuits are not in close distance); and receiving inductive power from the source (Column 2, lines 30-59)) . It would have been obvious to a person having ordinary skill in the art at the time of the invention to add additional coil on parks et al. inductive coupling system as taught by Garcia et al. in order to adapt a charging process based on the battery parameter information for the benefit of effective battery charging.

Regarding Claim10, Parks et al disclose the battery pack comprising a communications device (220) operatively coupled to the pickup coil (220).

Art Unit: 2838

Regarding Claim11, Parks et al disclose the battery pack in which the communications device (220) is configured to receive the computer readable data and transmit the data to the pick up coil (200b).

7. Claims 9, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parks et al. (US 5,455,466) in view of Garcia et al. (US 5,963,012) as applied to Claim8 above, and further in view of Stobbe (US 6,275,143).

Regarding Claim 9, neither Parks et al. nor Garcia et al. disclose, the processor unit is configured to provide authentication data for inductive energy charging. However, Stobbe discloses the apparatus in which the memory includes authentication data for authenticating the battery pack for the inductive energy transmission (Column 6, lines 5-20). It would have been obvious to a person having ordinary skill in the art at the time of the invention to implement authentication data transfer means in Parks et al. inductive coupling system as taught by Stobbe in order to protect against unintentional or unwanted battery charging.

Regarding Claim 13, Stobbe discloses the processor unit is configured to provide a digital security certificate to a charging source (Column 6, lines 5-20).

Regarding Claim 15, Stobbe discloses the an antenna (52) and a communications device (22,24) configured to receive the computer readable data and configured to transmit the data to the antenna for wireless data communications a charging source (Column 5, lines 35-45).

Art Unit: 2838

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parks et al. (US 5,455,466) in view of Garcia et al. (US 5,963,012).

Regarding Claim 12, Parks et al. disclose the claimed invention, except the processor unit is configured to provide a plurality of charging parameters to a charging source which provides the inductive energy. However, Garcia et al. disclose the processor unit is configured to provide a plurality of charging parameters to a charging source, which provides the inductive energy. It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Parks et al. inductive coupling system in order to transmit battery parameters as taught by Garcia et al. so that the device can make any necessary charging adjustments.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parks et al. (US 5,455,466) in view of Garcia et al. as applied to Claim 8 above, and further in view of Higuchi et al. (US 6,163,132).

Regarding Claim 14, neither Parks et al. nor Garcia et al. disclose the processor unit is configured to send data to the computer system so as to indicate it is receiving inductive energy. However, Higuchi discloses in Figure1 the processor unit (4b) is configured to send data to the computer system (5) so as to indicate it is receiving inductive energy (Column 4, lines 33-38). It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a computing and indicating system to the battery pack in Parks et al. as taught by Higuchi et al. in order to monitor battery status.

Art Unit: 2838

10. Claims 16, 17, 19, 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Garcia et al. (US 5,963,012).

Regarding Claims 16 and 22, Garcia et al discloses in Figures 2 and 3 a computer implemented method of charging battery pack, comprising the step of: receiving a polling message from a charging source (Column 2, lines 47-59); the polling message comprising energizing and de-energizing of the source; transmitting a request for power to the charging source (204); and receiving inductive power from the charging source (Column 2, lines 30-59)

(Noted that, the electromagnetic resonant wave Created by the coils established a mutual induction and a data transfer between the charger and the battery pack, which including energizing and de-energizing of a transmission element in the source (204) at a predetermined elapsed time value, for certain period of time is starts signal transmission when the electro magnetic waves are generated by the excitation circuits, and stops for certain period of times when the two circuits are not in close distance)

Regarding Claims 17 and 23, Garcia et al. disclose the step of transmitting includes a step of transmitting charging parameters to the charging source (column 2, lines47-59).

Regarding Claim 19, Garcia et al. disclose, a step of initiating a charger responsive to the step of receiving (Column 2, lines 30-59).

11. Claims 18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia et al. (US 5,963,012) in view of Stobbe (US 6,275,143).

Art Unit: 2838

Regarding Claim 18 and 24, Garcia et al. disclose the claimed limitation, except the step of transmitting includes a step of transmitting authenticating data to charging source. However, Stobbe discloses the step of transmitting includes a step of transmitting authenticating data to charging source. It would have been obvious to a person having ordinary skill in the art at the time of the invention to implement authentication data transfer means in Garcia et al. wireless battery charging system as taught by Stobbe in order to protect against unintentional or unwanted battery charging.

12. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia et al. (US 5,963,012) in view of Higuchi et al. (US 6,163,132).

Regarding Claim 20, Garcia et al. disclose the claimed invention, except a step of transmitting data to a computer system for indicating the step of receiving inductive power. However, Higuchi et al disclose in Figures 1 and 2 a step of transmitting data to a computer system for indicating the step of receiving inductive power (Column 4, lines 33-38). It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a computing and indicating system to the battery pack in Garcia et al. as taught by Higuchi et al. in order to monitor battery status.

Regarding Claim 21, Higuchi et al disclose in Figure 3 a step of displaying an object on a graphical user interface (6) indicative of the step of receiving (Column 4, lines 60-63).

Art Unit: 2838

Response to Arguments

13. Applicant's arguments filed 9/16/2005 have been fully considered but they are not persuasive.

Regarding applicants Claim 7 arguments, Claim 7 does not have the alleged elements argued such as "the transmission elements being coupled to the processor unit and providing inductive energy to a power adapter" Thus, the argument is irrelevant or not material.

Regarding applicants Claim 19 arguments, Claim 19 is addressed in the previous office action under paragraph 15, please see also paragraph 10 above. Regarding Claims 16 and 22, Garcia teaches a polling message as a magnetic resonant wave which establishes a mutual induction power transfer between the coils, please see the above rejection paragraph 3 and Column 3, lines 19-40 of Garcia's prior art.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

Art Unit: 2838

the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

SB

KARL D. EASTHOM